Clithon auxilloi (Neritidae), a new species from the Central Philippines

Bavius Gras

Achter de Hoven 37, 8933 AG Leeuwarden, the Netherlands

b.gras@wxs.nl

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ABSTRACT

A new species of *Clithon*, is described from the Central Philippines and named after the discoverer Ogie Auxillo: *Clithon auxilloi* sp. nov. The new species was collected in a in a fast flowing river at Philippines, Leyte Island, Southern Leyte Province, Silago, Barangay Tuba-on, Matal-ay River. The species is only known from the type locality. The species has some unique features that makes it easy identifiable: semi-lunar orange parietal shelf, the pattern of tents on the shell and a dark, bluish-grey operculum with two white spiral bands.

Key words – Mollusca, Gastropoda, Neritimorpha, Neritidae, *Clithon*, Philippines, new species, taxonomy

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INTRODUCTION

For more than five years Ogie Auxillo has sold me marine and freshwater nerites from Leyte Island. Visiting many localities on travel distance from his place of residence Barangay Pasil, Malitbog, Ogie has provided me with many interesting species. So far in total 60 species of Neritidae; some of them even exceeding the published world record sizes. As he searches intensively in various habitats, it is no surprise that he recently discovered a new species. The new species of *Clithon* has some unique characters that separates it from other species in the genus and is described herein.

Textfig. 1. Ogie Auxillo collecting nerites in the Matal-ay River, Leyte, Philippines. Photo courtesy Ogie Auxillo**.**

Abbreviations:
BG — Bavius Gras, Leeuwarden, the Netherlands
HD — Henk Dekker, Winkel, the Netherlands
MNHN — Muséum National d'Histoire Naturelle, Paris.
Naturalis — Naturalis Biodiversity Center, Leiden, the Netherlands
RV — Rob Vink, Vlaardingen, the Netherlands

TAXONOMY

Class Gastropoda Cuvier, 1795
Subclass Neritimorpha Golikov & Starobogatov, 1975
Superfamily Neritoidea Rafinesque, 1815
Family Neritidae Rafinesque, 1815
Subfamily Neritininae Poey, 1852
Genus *Clithon* Montfort, 1810
Type species *Nerita corona* Linnaeus, 1758 (original designation).

Clithon auxilloi **sp. nov.**

(Plate 1 Fig. 1a-g, Plate 2 Fig. 1a-4g, Textfig. 2)

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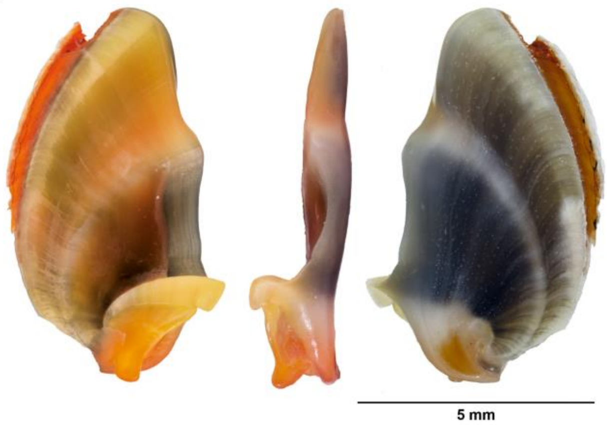
Clithon sp. i – Eichhorst, 2016: 309, pl. 65 figs 5-7.

Description. – Shell of average size for the genus. The smallest adult observed measures 12.5 mm in largest diameter, the largest shell observed measures 22 mm in largest diameter.

Periostracum persistent, greenish brown, and translucent, showing the tents underneath. The base color of the shell is gray with a pattern of white tents (when the periostracum is removed). Small, globose and smooth shell with a thin lip. The juvenile shell is glossy in appearance, without spiral sculpture and with fine growth lines. Adult specimens develop irregular pronounced growth lines on the last whorl. Spire is slightly eroded in juveniles, but in adults the spire and top of shell are for the most part absent. The parietal shelf is smooth and flat, with a sharply defined semi-lunar shape along the rear margin. There is large single protruding tooth on the upper third of the columella and a slight indentation below this tooth with small teeth below and above. The parietal shelf is for the larger part orange colored. The outer side of the operculum (Textfig. 2) is dark bluish-grey colored with two white spiral bands, running from the nucleus to the lateral terminus. One spiral band bordering the lamella and one spiral band across the middle of the operculum. White area around the nucleus. The colors of the operculum in juveniles are bright, while the colors of the operculum in adults are faded. A fragile translucent and red corneous lamella runs along the labral margin of the operculum, from below the nucleus to the lateral terminus. The interior surface of the operculum is dark brown in juveniles, this changes to light brown in adults. The apophysis is thin, flared and swept back at 5°. The substantial nuclear tooth is connected to most of the apophysis and transitions into a small orange peg. There is no medial or lateral tooth.



Textfig. 2. Operculum of holotype of *Clithon auxilloi* sp. nov.

Holotype. – Holotype Height 14.0 mm, width 13.6 mm, Pl. 1 Fig. 1a-g, Coll. Bavius Gras no BG 2633 (pending acceptance of the collection by any museum).

Paratypes. – All from the type locality. Paratypes 1-4: Coll. Naturalis, RMNH.MOL.453883; 1. height 17.1 mm, width 18.4 mm; 2. height 16.7 mm, width 18.1 mm; 3. height 13.5 mm, width 13.4 mm. 4. height 15.5 mm, width 17.5 mm, Pl. 2 Figs 2-5.
Paratype 5-9: Coll. MNHN, MNHN-IM-2018-1175; 5. height 12.6 mm, width 12.2 mm; 6. height 12.7 mm, width 12.3 mm; 7. height 13.9 mm, width 13.2 mm; 8. height 17.6 mm, width 17.6 mm; 9. height 18.0 mm, width 18.5 mm; Paratypes 10-13: Coll. HD 52407; Paratypes 14-17: Coll. RV 21076; Paratypes 18-49: Coll. BG 2634.

Type locality. – Philippines, Leyte Island, Southern Leyte Province, Silago, Barangay Tuba-on, Matal-ay River, 10°32’47.9”N 125°09’44.9”E.

Textfig. 3. Scenery of the Matal-ay River, Leyte, Philippines.
Photo courtesy of Ogie Auxillo

Habitat. – Collected in a fast flowing river, mid- to upper stream, on rocks in the shade, (Textfigs. 1 and 3). This species was collected in a rainy period, with a higher water level than normal. Ogie observed that *Clithon auxilloi* sp. nov. lives at 0.3 m depth, while *Septaria cumingiana* (Récluz, 1843) lives deeper on the rocks.

Distribution. – At present only known from the type locality.

Etymology. – Named after Rogelio Montialto Auxillo (“Ogie”), a shell dealer at Malitbog, Leyte Island, Philippines.

Comparison. – Research did not result in a similar species. The combination of the described traits is unique to this new species. There is no other species present in the genus *Clithon* with a semi-lunar orange parietal shelf, the pattern of tents on shell and a dark, bluish-grey operculum with two white spiral bands.

Remarks. – The quality of the shells and opercula deteriorates soon after collecting from the river, resulting in fading of the colors of the parietal shelf and the operculum. The red lamella breaks easily from the operculum.

Eichhorst (2016: 309) mentions this species as *Clithon* sp. i. The recorded locality given by the shell dealer of that specimen is “Philippines, Leyte Bay, Barangay Caridad”. Despite several visits to Caridad, Ogie was not able to find the present new species there. So it remains a mystery where these specimens were actually found.

ACKNOWLEDGEMENTS

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REFERENCES

Eichhorst, T. E. (2016). Neritidae of the world. Conchbooks, Harxheim. Vol. 1: 1-694, pls 1-199.

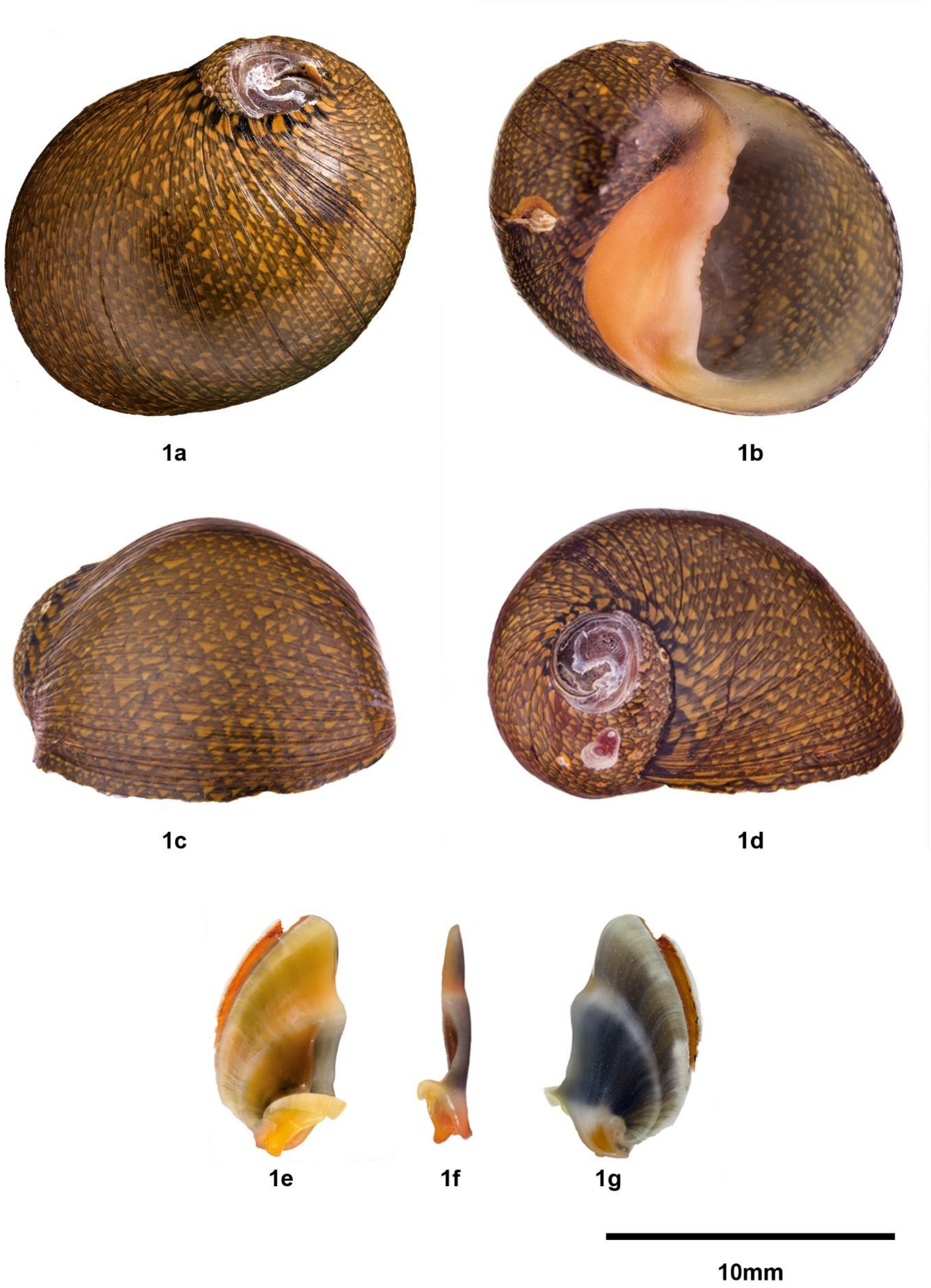

Plate 1. *Clithon auxilloi* sp. nov. Philippines, Leyte Island, Southern Leyte Province, Silago, Barangay Tuba-on, Matal-ay River. 1. Holotype, height 14.0 mm, coll. BG.

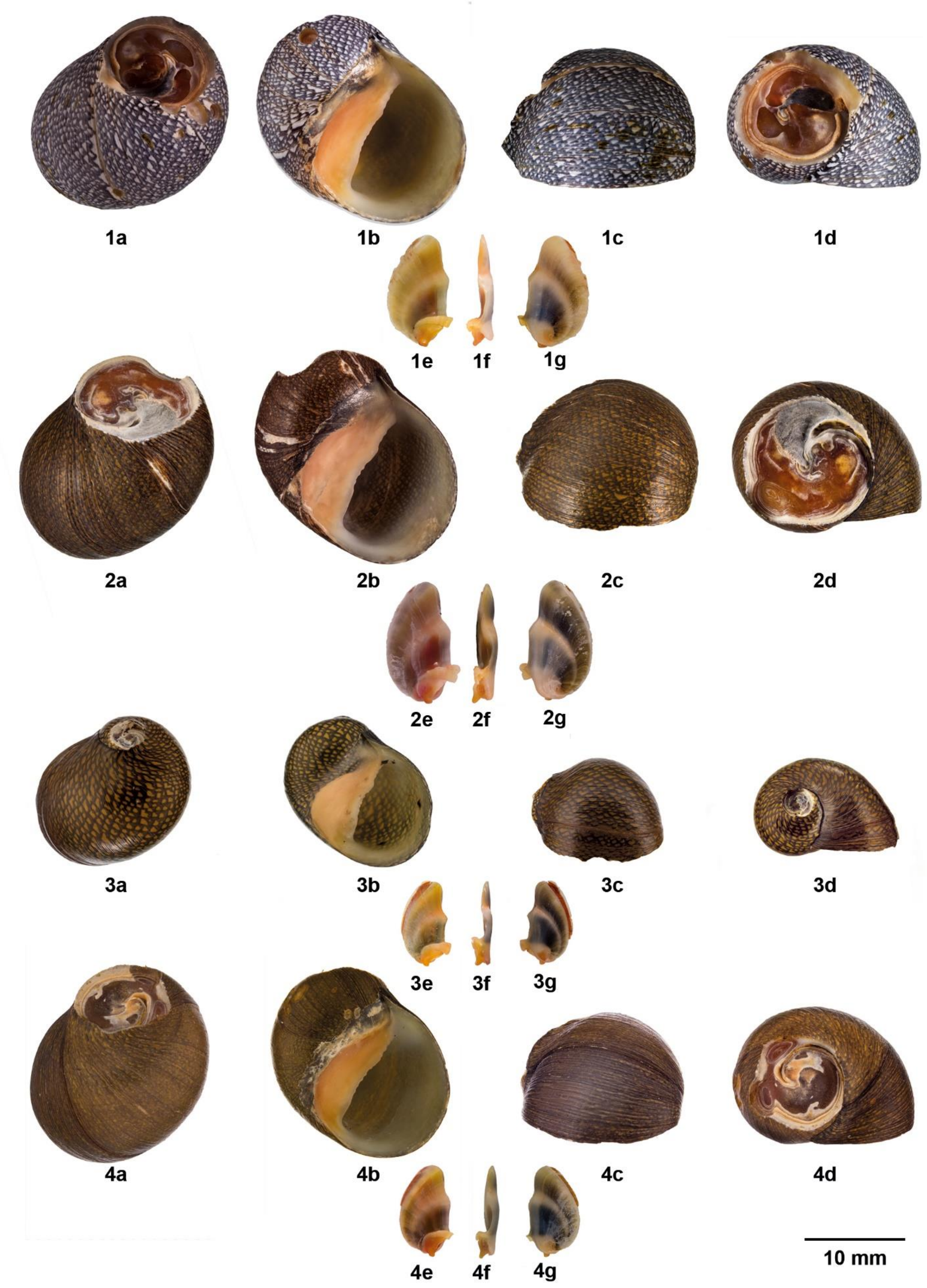

Plate 2. *Clithon auxilloi* sp. nov. – Philippines, Leyte Island, Southern Leyte Province, Silago, Barangay Tuba-on, Matal-ay River, coll. Naturalis RMNH.MOL.453883. 2. Paratype 1, height 17.1 mm. 3. Paratype 2, height 16.7 mm. 4. Paratype 3, height 13.5 mm. 5. Paratype 4, height 15.5 mm.

EDITORIAL NOTES

Editor in charge: Aart Dekkers.